

Interview Summary	Application No.	Applicant(s)	
	10/769,167	SISSON ET AL.	
	Examiner CHRISTOPHER P. BRUENJES	Art Unit 1794	

All participants (applicant, applicant's representative, PTO personnel):

(1) CHRISTOPHER P. BRUENJES. (3) Alvin Rockhill.

(2) Ed Sisson. (4) _____.

Date of Interview: 06 May 2008.

Type: a) Telephonic b) Video Conference
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.

If Yes, brief description: Showed comparative bottles in which the claimed invention was utilized and one where it was not. Attached are picture diagrams of the actual demonstration.

Claim(s) discussed: all of record.

Identification of prior art discussed: all of record.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

/Christopher P Bruenjes/
Examiner, Art Unit 1794

Examiner Note: You must sign this form unless it is an
Attachment to a signed Office action.

Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed the current claims against the prior art especially Kim. Applicant explained how Kim is changing the blend to lessen the physical haze. Applicant further explained that the blends taught by Kim would not necessarily contain domains in the claimed range. A proposed amendment was formulated to address the inadvertent domains within the claimed range by adding a limitation that the container has a haze of at least 4% absent the light absorbent composition. Attached is explanations of why the prior art does not teach the claims and also the proposed amendment to claim 27.

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted;
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Draft Proposed

27. (previously presented) A colored transparent article comprising:
a thermoplastic polymer matrix; a plurality of domains; and one or more light absorbing compositions; wherein the haze of the article as measured on a film of 15 mils in thickness in the absence of the one or more light absorbing compositions is at least 4%; wherein the
[a] plurality of domains, and each encompasses encompassing at least one incompatible filler, dispersed in the thermoplastic polymer matrix, wherein the domains having have a range of dimensions in an axial plane of the article, wherein the dimensions of at least some of the domains in the axial plane of the article fall within a range of from about 400 nm to about 700 nm;
wherein the one or more light absorbing compositions is present in an effective amount of one or more light absorbing compositions that alters to alter the light absorption of the colored transparent article so that the light absorbed by a single continuous portion of the colored transparent article is such that the total amount of relative light available for reflectance, X, is less than 9.6 in an equation

$$X = \sum (1 - A_i) \times N_i$$

where A_i is the percent of light absorbed at a wavelength i determined on the single continuous portion of the colored transparent article without the incompatible filler present,
where N_i is the number of domains per hundred square microns at the wavelength i ,
where the wavelength i ranges from 400 nm to 700 nm;
and wherein said colored transparent article is of a single layer construction:

Tajima 5,300,572 1994 (Kim 2 US2002/1684 2002	Al Ghatta EP 0964031 1999	Al Ghatta WO 03/029349 2003	Cahill US6083585 2000	IIADA NPL 2001	Turner US6444283 2002
OPP Ref	D2	D3	D12	D1		D19
Importance of Haze	Haze is undesirable [38]	Haze limits amount of polyamide, (pg 2, 1st para, last sentence)	Necessary for Commercial Packaging (C4,L4-8) See also C3,L53 – 61;	Transparency is one of the most important characteristics of PET cannot be maintained in blends (p1987, para 2)	Destroys Practical Application in Packaging (C1, L55-59)	
Cause of Haze	Domains Stretched Greater than the wavelength of light [23]		Domains about the size of wavelength of light (c11,L14-17)	Number and size of particles, plus refractive index. (p1987, Abstract)		
Solution to Haze	Keep the domains less than the wavelength of light [23, 25]	Keep domains within 30-200nm (p2, 3rd para, L1-6)	Keep domains less than 300nm (c17,L56-58; C5,L48-53)			
Method To Solve	Use compatabilizer to drive the domain diameter down C2L41-42; C7,L31-34 (Ex 12, Ex 20) Domains 100nm	Use low stretch extrusion blow process [25]	Use high shear conditions (p2, last three lines)	Control Domain Size (c20/L24-29) (c23/L53-57) Low molecular weight to maintain transparency (c5/L48-54; (c11/L30-35) and/or longer residence times for reaction	Low Molecular Weight PA (3/L24-30)	
COLOR	Not Found in Text	Neutral, colorless, avoid green	Color only mentioned as a measurement, not as an additive (p5, para2; p6, para 5)	Few, if any, of these typical additives [colorants, etc] are used for bottle applications that require clarity. (C18,L53-54)	May be added so long as does not hinder object of invention (C7,L9-24)	

KIM REFERENCES - COLOR

	Kim 1 ('978) 5,314,987 1994		Kim 2 US20020001684 2002	
COLOR	Caused by catalyst system	3	45-53 It is known in the art that the color in PET/MXD6 structures is due to the presence of catalyst residue in the polyester.	50 6-8
Switching catalysts moves system from green to yellow	4	4-12	This color can be controlled limiting the amount of catalyst.	50 8-9
Yellowish color neutralized by gradual addition of metal (Co) to “a/g – PET blends”	4	22-28		
Limit the amount of Catalyst to only neutral (no color)	4	31-43	Do not make a colored container Free from green	38 6-8 39 5-6
Monolayer is the control 7.5% MXD6, PET, made on a Nissei	Table I 8	3-6	Similar structure as '987, only amount of Cobalt is different	Tb 3 26, 27

KIM REFERENCES - HAZE

	Kim 1 ('978) 5,314,987 1994	Kim 2 US20020001684 2002	
	Location/Cite		Location/Cite
	Col	Lines	Para Lines
HAZE			
Clarity means neutralization of green/yellow, (not transparency/haze)	5 4	37-38 49-51	Prior art structures all hazy, includes Kim 1. 31 13-14
CAUSES OF HAZE			
		Orientation enlarges the domain size of MXD6 so that it is greater than the wavelength of light and this results in increased scattering.	23 7-10 Tb 1
		...orientation of PET and MXD6 (2 stage process) results in the development of haze caused by refractive index changes and the enlarged domains of MXD6	50 9-13
SOLUTIONS TO HAZE			
Reduce the amount of the blend to 10% of wall thickness, Ex 2-C/D vs A/B	Table 1 8	53-57	PET blends is utilized to produce clear structures having improved oxygen barrier properties by limiting the degree of orientation so that the MXD6 domain increases in size up to <u>less than the wavelength of light</u> .
Improved optical properties of multilayer [over monolayer] (substantially transparent), due to the fact that the blend (Ex 2-B green) is only 10% of structure and outer layers are transparent (no MXD6)	8	53-61	Use low stretch extrusion blow process – It is believed that [t]he domain size of the unoriented MXD6 is less than the wavelength of light...